Title: Adversarial Search in First-Person Shooter Video Game Duels

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Abstract: The complexity of artificial intelligence required for modern games is getting unmanageable. Therefore, we are seeking for techniques allowing easy creation of a complex artificial intelligence. Adversarial search has become such a technique in the area of board games. Recently, an idea to apply adversarial search on other kinds of games has come up. Though, in the area of First-person shooters, no experiments examining this idea has been done yet. This thesis offers such an experiment, concerning the Deathmatch mode of two players. Our results show that the basic implementation of adversarial search is not very successful. However, it has some potencial which should be further examined. Another contribution of this thesis is creation of a framework which significantly simplifies further experimenting in this area.

Keywords: adversarial search, duels, video games, first-person shooters